

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/820,930	04/08/2004	Anthony Catalano	TAG-001-US-n	8748
21833 7.	590 09/07/2006		EXAMINER	
PRITZKAU PATENT GROUP, LLC			VO, TUYET THI	
993 GAPTER ROAD BOULDER, CO 80303			ART UNIT	PAPER NUMBER
200223, 0			2821	-
			DATE MAILED: 09/07/200	6

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
	10/820,930 Examiner	CATALANO, ANTHONY	
Office Action Summary		Art Unit	
·	Tuyet Vo	2821	
The MAILING DATE of this communication Period for Reply	appears on the cover sheet w	ith the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REWHICHEVER IS LONGER, FROM THE MAILING Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory por Failure to reply within the set or extended period for reply will, by some Any reply received by the Office later than three months after the rearned patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMMUNION R 1.136(a). In no event, however, may a r n. eriod will apply and will expire SIX (6) MON tatute, cause the application to become AE	CATION. eply be timely filed ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 2	20 June 2006 ·		
	This action is non-final.		
3) Since this application is in condition for alle		ers prosecution as to the ments is	
closed in accordance with the practice und		•	
Disposition of Claims	, ,	,	
4)⊠ Claim(s) <u>50-54,57-61,63,64 and 66-68</u> is/a	re pending in the application.		
4a) Of the above claim(s) is/are with			
5) Claim(s) is/are allowed.			
6) Claim(s) 50-54,57-61,63,64,67 and 68 is/a	re rejected.		
7)⊠ Claim(s) <u>66</u> is/are objected to.	•		
8) Claim(s) are subject to restriction a	nd/or election requirement.		
Application Papers			
9) The specification is objected to by the Exar	miner.		
10) The drawing(s) filed on is/are: a)		by the Examiner.	
Applicant may not request that any objection to	the drawing(s) be held in abeyar	nce. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the co	rrection is required if the drawing	(s) is objected to. See 37 CFR 1.121(d).	
11)☐ The oath or declaration is objected to by th	e Examiner. Note the attached	d Office Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for for a) All b) Some * c) None of:	eign priority under 35 U.S.C. {	§ 119(a)-(d) or (f).	
1. Certified copies of the priority document	nents have been received.		
2. Certified copies of the priority document	nents have been received in A	pplication No	
3. Copies of the certified copies of the	priority documents have been	received in this National Stage	
application from the International Bu	reau (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a	list of the certified copies not	received.	
Attachment(s)			
) Notice of References Cited (PTO-892)		Summary (PTO-413)	
()		s)/Mail Date nformal Patent Application	
Paper No(s)/Mail Date	6) Other:	• •	

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 50, 51, 53, 54, 57-61, 63, 67 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chun (US Pat. 6,924,605) in view of Dubuc (US Pat. 6,981,784).

Regarding claims 50, 53, 57-61 and 63, 67 and 68, Chun discloses a LED flashlight device (Figs. 4-7) for illuminating an object by directing a beam of light (65) from the device onto the object, comprising:

a housing (12) having a reflecting lens (60) arrangement supported therewith, the lens arrangement including light reflector surface segments which circumscribes a given area and which defines a forward extending central axis of illumination (Figs. 1 and 4); and

an illumination assembly including a printed circuit board (45) having a front planar surface (A, marked by examiner) and a back planar surface (B, marked by examiner), wherein a side edge extending between said front and back surface considered as a thickness of the printed circuit board, a light emitting diode (65) on the front surface (A), a control circuitry (90, 100) connected to the light source (65) and printed on at least one of surface (col. 1, lines 54-63) of the printed circuit board (45) for connecting the light source LED (65) to a power source (55) the light source LED is disposed within the given area in a way it causes light out of a given area guide via means of reflection to a general direction of a forwardly extending central axis of illumination, wherein the illumination assembly includes another of LED light source (110).

Application/Control Number: 10/820,930

Art Unit: 2821

However, Chun does not teach the light source having an underside base is adjacent to and confronting the front surface of the PCB.

Dubuc discloses in figure 10, plural solid state lighting sources (50) having underside bases adjacent and confront/perpendicular directly to the front surface of printed circuit board (60).

It would have been obvious to one having ordinary skill in the art at the time the invention was made utilize a directly mounting light sources on the one surface of PCB as taught by Dubuc in order to extend capable of mounting light source in variety manner for illumination or aesthetical purpose. Such implementation is considered as a routine skill in the art.

Regarding claims 51 and 54, Chun in view of Duduc, Chun further discloses the LED (65) having two free ends (94, 95) and opposite ends (94*, 95*), wherein the two free ends (94, 95) and the opposite ends (94*, 95*) define an axis that is parallel to the forward extending axis of the PCB (45).

3. Claims 52 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chun as applied to claim 1 above, and further in view of Dubuc (US Pat. 6,981,784).

Chun discloses substantially the claim invention as noted above except for a control circuitry is printed on the back surface of the printed circuit board and the illumination assembly is extended to retrofit with an incandescent light source.

Duduc fulfills the missing features in Chun by disclosing LED light source device (Figs. 10 and 14), in that, Duluc clearly suggests all of electronic components including a control circuitry for driving LED are printed on the back/reverse side of a printed circuit board for enhancing heat radiation while a plurality of LEDs mounted in a front/forward side of the printed circuit board (col. 4, lines 16-19). Dubuc also teaches not limit the operation of the LED light source system to a LED light source device, but extending the ability of adapting to any type of light source device such as an incandescent bulb (col. 4, lines 28-37).

It would have been obvious to one having ordinary skill in the art to utilize extensive teachings of Dubuc into the Chun lighting system in order to obtain a better light source system with higher reliable operation.

Art Unit: 2821

Allowable Subject Matter

- 4. Claim 66 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 5. The following is a statement of reasons for the indication of allowable subject matter: the prior fails to establish first and second electrically conductive bumps on the lengthwise ends of the printed circuit board for serving as an electrical input and output when connected to a power source as required.

Remarks

Amendment filed 6/20/2006 has been entered.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuyet Vo whose telephone number is 571 272 1830. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571 272 1740. The fax phone numbers for the organization where this application or proceeding is assigned are 571 273 8300 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571 272 2800.

Information regarding the status of an application or status information for publicing/unpublicing applications may be obtained from the Patent Application Information Retrieval (PAIR) system, see http://pair-direct.uspto.gov. Should you have questions on access to the PAIR system, contact the Electronic Business Center (EBC) at toll free 866-217-9197.

Page 5

Tuyet Vo

Primary Examiner

September 05, 2006